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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,087	03/22/2004	Rajan Rajendran	0315-000505/REA	1688

27572 7590 01/19/2007
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EXAMINER

RODRIGUEZ, WILLIAM H

ART UNIT	PAPER NUMBER
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3746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/806,087

Applicant(s)

RAJENDRAN ET AL.

Examiner

William H. Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29, 71 and 75-120 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29, 71 and 75-120 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/28/06; 3/22/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendment and remarks filed 8/16/06. Since the examiner has applied new grounds of rejection, this office action is being made non-final to afford the applicant the opportunity to respond to the new grounds of rejection.

Specification

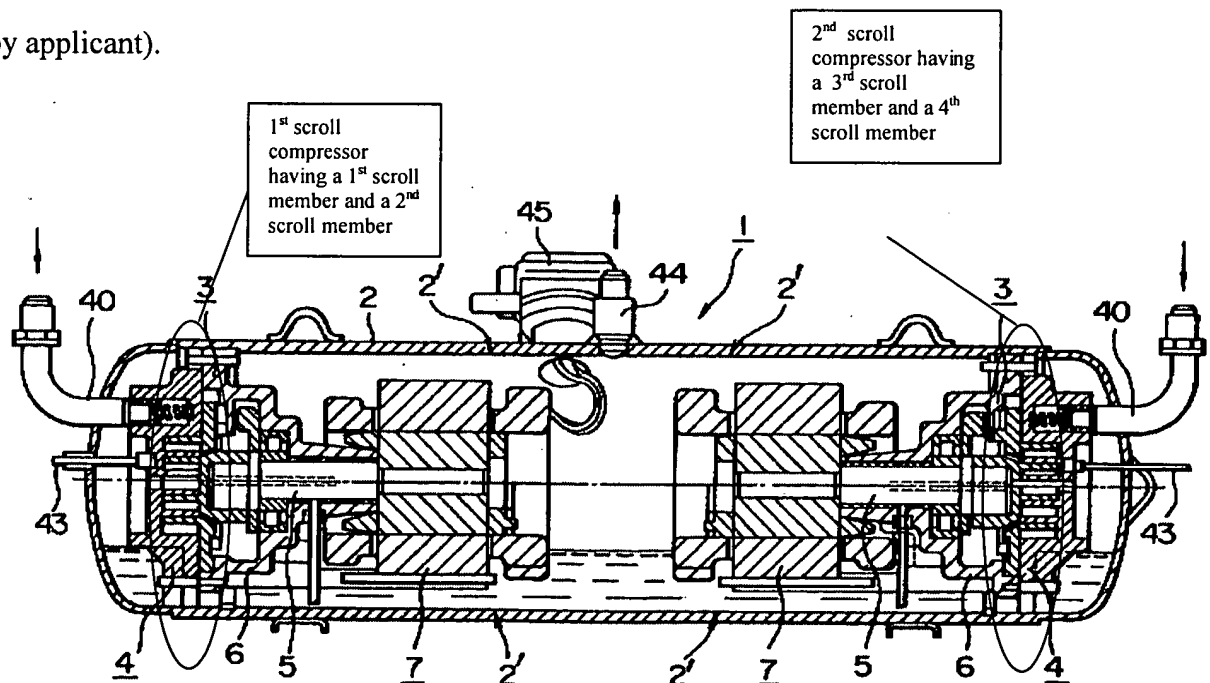
1. The specification is objected to as *failing to provide proper antecedent basis for the following claimed subject matter (claims 76-120): “movable between a first relationship and a second relationship; a first actuation device, and a second actuation device”*. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). **Examiner suggests replacing the recitations “movable between a first relationship”; “a second relationship”; “a first actuation device”; “a second actuation device” by ---movable between a first position--; --a second position--; --a first capacity modulation system--; --a second capacity modulation system-- respectively. Appropriate correction is required.**

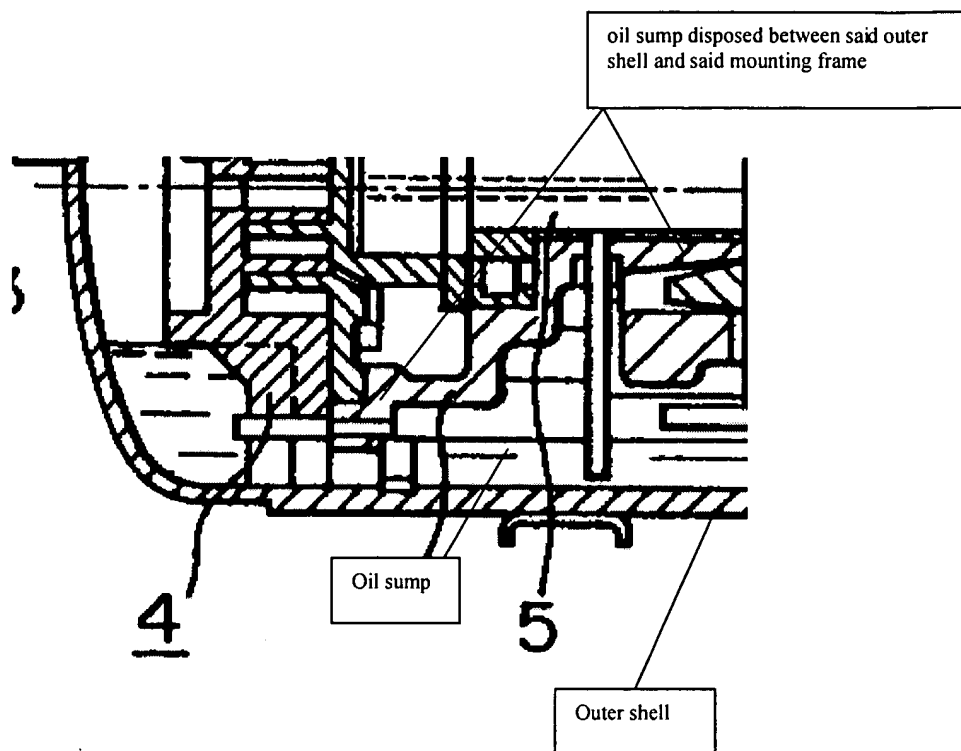
Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 76-120 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.



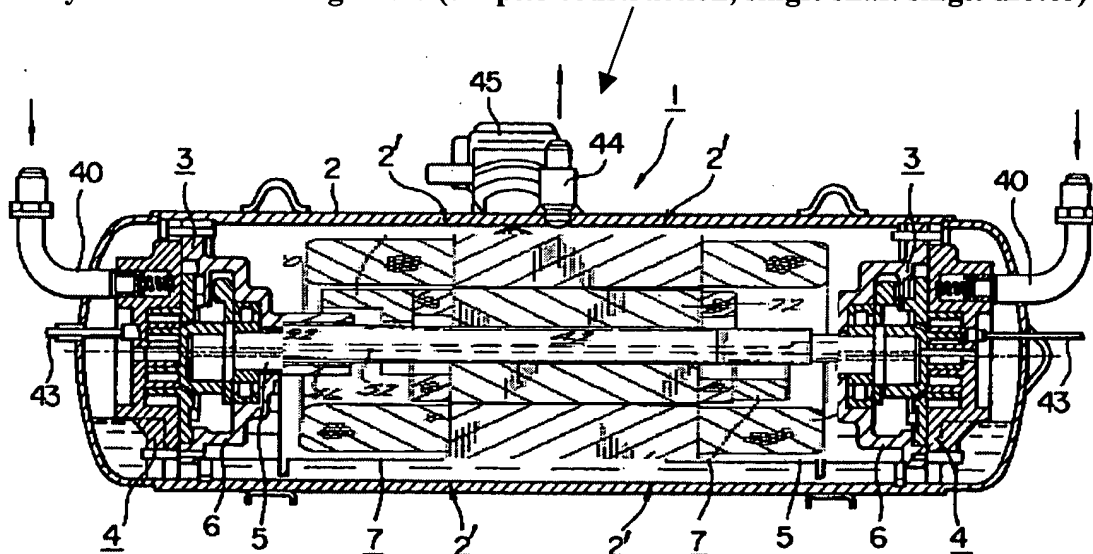


Murayama (particularly Figures 1-3) teaches a scroll machine comprising: an outer shell 2, a suction pressure zone, a discharge pressure zone, a first scroll compressor disposed within said shell, said first scroll compressor comprising a first orbiting member “first scroll member” and a first non-orbiting member “second scroll member”, a second scroll compressor disposed within said shell, said second scroll compressor comprising a second orbiting member “third scroll member” and a second non-orbiting member “fourth scroll member”, each of the scroll member comprising an end plate and a spiral wrap, a drive shaft for driving each of the scroll compressors, a mounting frame 6 disposed within said suction pressure zone of said outer shell, said first and second scroll compressors being attached to said mounting frame, a motor disposed within said suction pressure zone and being attached to said mounting frame and drivingly coupled to said drive shaft, and oil sump 29 disposed between said outer shell and said mounting frame, said oil sump 29 being in communication with said first scroll compressor through a first

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bore (23) in said drive shaft and said second scroll compressor through a second bore (23 on the other side of the scroll machine) in said drive shaft, a first actuation device (20, 38, 39, 40, 41), a second actuation device (20, 38, 39, 40, 41 on the other side of the scroll machine), a first fluid injection fitting 43 and a second fluid injection fitting (43 on the other side of the scroll machine), said motor comprising a stator and a motor, and a plurality of bearings. **Murayama** does not teach a drive shaft extending between and coupled to each of said first and second scroll compressors. However, **Nagamoto** (particularly Figure 1) teaches a scroll compressor similar to Murayamas's, but having a simpler system by using a single shaft extending between and coupled to each of said first and second scroll compressors and a single motor driving both compressors. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the teachings of Nagamoto and have modified Murayama's scroll machine by using a single drive shaft and a single motor to drive both scroll compressors in order to reduce the cost of the compressor by reducing the number of motors (having a single motor rather than two), and simplify the system by reducing the number of parts.

Murayama in view of Nagamoto (simpler construction, single shaft single motor)



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6. Claim 75 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rajendran et al. (US 6,264,446).

Rajendran (particularly Figure 3) teaches a scroll machine comprising: an outer shell 14, a suction pressure zone, a discharge pressure zone, a first scroll compressor disposed within said shell, said first scroll compressor comprising a first orbiting member and a first non-orbiting member, a drive shaft for driving said scroll compressor, a mounting frame 12 disposed within said suction pressure zone of said outer shell, said first scroll compressor being attached to said mounting frame, a motor disposed within said suction pressure zone and being attached to said mounting frame and drivingly coupled to said drive shaft, and oil sump 68 disposed between said outer shell and said mounting frame, said motor comprising a stator and a motor, and a plurality of bearings. With regards to the limitations “a second compressor” that Rajendran fails to teach, it has been held *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) that mere duplication of parts has no patentable significance unless a new and unexpected result is produced, see MPEP 2144.04 VIB. In the instant case, adding a second compressor to Rajendran system does not produce an unexpected result. One of ordinary skill in the art at the time the invention was made would have found it obvious to add a second scroll compressor to Rajendran’s scroll machine in order to achieve increased compressor capacity of the scroll machine.

Response to Arguments

7. Applicant's arguments with respect to claims 1-29, 71 and 75-120 have been considered but are moot in view of the new ground(s) of rejection.

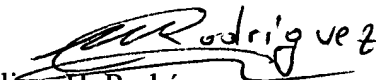
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Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodríguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ehud Gartenberg can be reached on 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


William H. Rodríguez
Primary Examiner
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1/9/07